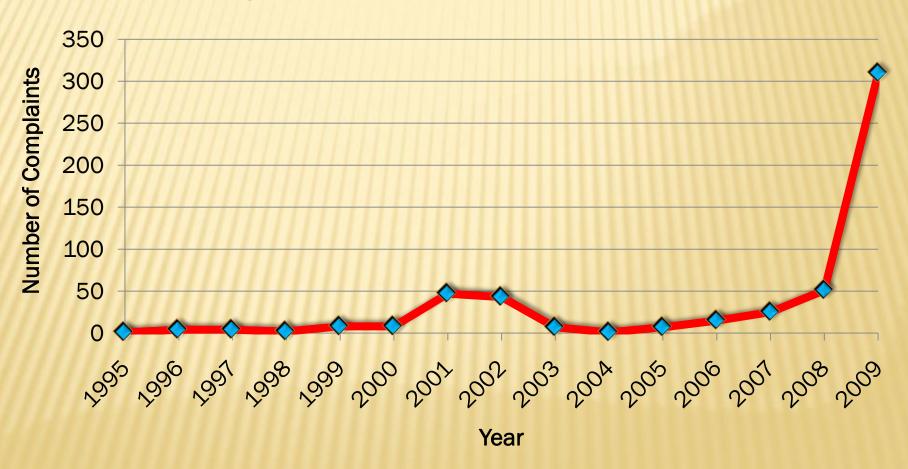
SUNSHINE CANYON LANDFILL ODOR NUISANCE MITIGATION



County of Los Angeles Dept. of Public Works
December 2, 2010

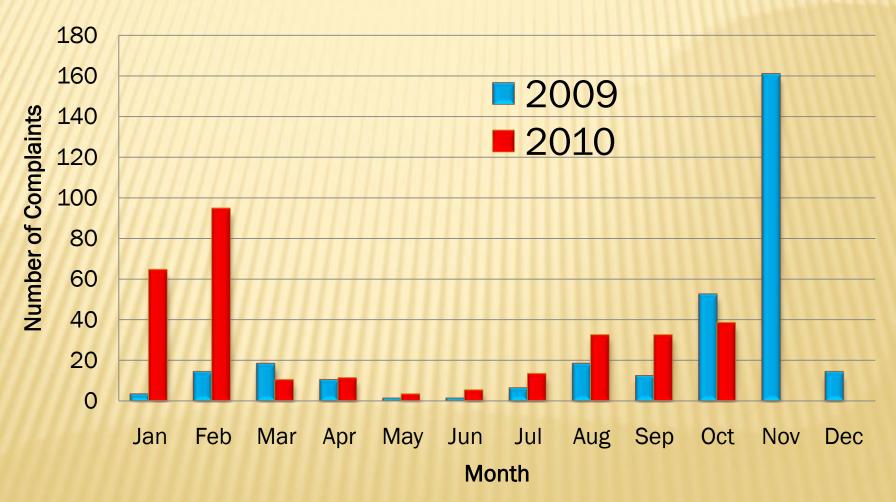
BACKGROUND

Historical trend of alleged odor complaints received by AQMD



BACKGROUND

× 2009 vs. 2010 alleged odor complaints



Source: AQMD. The number of "verified" complaints is not yet available, and may be lower.

POTENTIAL SOURCES OF ODOR

- Increases in tonnages delivered
- Working face size & location
- Monday morning deliveries
- Wind direction & climate
- Trash trucks on haul road
- Destruction of vegetation due to wildfires in 2008

- Landfill gas emissions
- Type of daily cover material on working face
- Practice of removing inplace cover soil on Monday Mornings



Photo courtesy of Republic Services

AQMD - ORDER FOR ABATEMENT 3/24/10

* Measures Taken:

- + Restricting working face size
- Reducing trash delivered on Monday mornings
- + Misting and odor control systems
- + Developing study proposals (neutralizers, landfill gas, working face)
- + Vegetation in southern areas



Photo courtesy of http://www.mswmanagement.com/the-latest/dustboss-db-60.aspx

COUNTY IMPOSED MEASURES

DPW LETTER 9/27/10

Immediate odor mitigation requirements

- + Discontinue tarp use as daily cover
- + Use compacted soil as daily cover material
- + Keep compacted soil in-place
- + Alternative daily cover material requires prior written approval from DPW

Submit Odor Mitigation Plan

- + Odorous loads, odor patrol, landfill gas
- + Republic detailed the plan in its letter of October 27



Managing odorous loads

- + Trained scalehouse personnel identifies loads
- + Odorous loads buried immediately
- + Unusual waste not allowed if odors are too strong



Photo courtesy of Republic Services

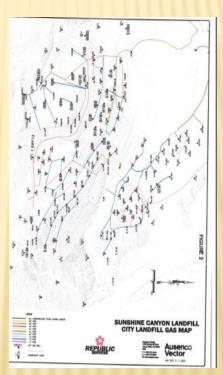
Routine odor patrols

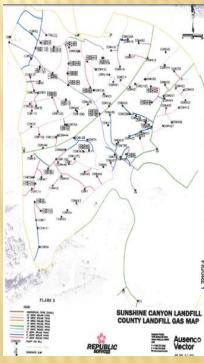
- + Continuous odor patrol between 7 9am, Monday through Fridays
- + Immediate survey when complaint is received
- + Survey will document names, route, description of odors, and corrective actions taken



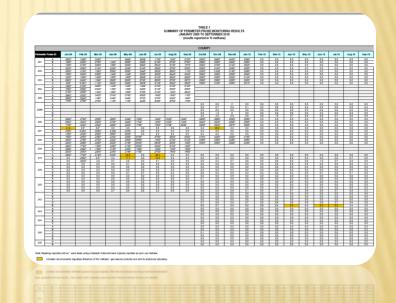
- Gas collection and control system
 - + 215 vertical gas wells
 - + Header and lateral piping
 - + Horizontal collectors
 - + 3 flare stations







- Perimeter probe monitoring system
 - + Monitored on monthly basis
 - + Quarterly surface monitoring
 - Tables summarizing gas exceedences



Corrective actions and measures taken

- +50 extra gas extraction wells in June & July
 - ×42 on County side, 8 on City side
- + Damaged wells replaced with new ones
- + Additional soil cover around well casing
- + Gas well tuning
- + Landfill gas prevention work plan
 - ×Implementation Schedule



Photo courtesy of Republic Services

NEXT STEP

- Work with AQMD as lead air quality agency, SCL-LEA, City of Los Angeles, and County Regional Planning
 - + Continue monitoring odor nuisance complaints
 - + Establish performance measures to evaluate effectiveness of mitigation measures
 - Review and approveOdor Mitigation plan



QUESTIONS AND COMMENTS

